WHAT IS CLAIMED IS:

1. A method of producing an hRNA expression module for a specific target nucleic acid, said method comprising:

(a) ligating a linker nucleic acid to an initial dsDNA that corresponds to said shRNA to produce a single-stranded intermediate nucleic acid that comprises a linker domain flanked by intra-complementary domains; and

(b) converting said intermediate nucleic acid to a linear dsDNA that includes at least one copy of said shRNA expression module, where said expression module comprises a linker domain flanked by hRNA coding domains.

2. The method according to Claim 1, wherein said method further comprises producing said initial dsDNA from said specific target nucleic acid.

3. The method according to Claim 2, wherein said initial dsDNA is produced by fragmenting said target nucleic acid.

4. The method according to Claim 3, wherein said target nucleic acid is enzymatically fragmented.

5. The method according to Claim 4, wherein said hRNA expression module is an shRNA expression module.

6. The method according to Claim 4, wherein said two or more restriction endonucleases are selected to produce an enzyme combination that cleaves said target nucleic acid into fragments of a predetermined size.

7. The method according to Claim 1, wherein said method further comprises size modifying said intermediate nucleic acid.

8. The method according to Claim 7, wherein said intermediate nucleic acid is enzymatically size modified.

9. The method according to Claim 1, wherein said converting step does not include an amplification step.

10. The method according to Claim 1, wherein said converting step includes an amplification step.

11. The method according to Claim 10, wherein said amplification comprises PCR.

12. The method according to Claim 10, wherein said amplification comprises rolling circle amplification.

13. A method of producing a shRNA specific for a target nucleic acid molecule, said method comprising:

producing an expression module for said shRNA according to the method of Claim 1; and

transcribing said expression module to produce said shRNA.

14. The method according to Claim 13, wherein said method is in vitro.

15. The method according to Claim 13, wherein said method occurs inside of a cell and said method further comprises introducing said expression module into said cell.

16. The method according to Claim 13, wherein said expression module is present on a vector.

17. A single stranded nucleic acid comprising complementary domains separated by a linker domain, wherein said complementary domains hybridize to each other to produce a hairpin structure having a double-stranded stem domain and single stranded loop domain, wherein said double-stranded stem domain comprises a restriction endonuclease site.

18. The nucleic acid according to Claim 17, wherein said restriction endonuclease site is a substrate for an endonuclease that cleaves a nucleic acid at a cleavage site that is a defined distance from said site.

19. The nucleic acid according to Claim 18, wherein said defined distance is from about 10 to about 40 bp.

20. The nucleic acid according to Claim 18, wherein said double stranded stem domain further comprises at least one additional restriction endonuclease site.

21. A single-stranded intermediate nucleic acid that comprises a linker domain flanked by intra-complementary domains, wherein said intermediate nucleic acid comprises a nucleic acid according to Claim 17.

22. A closed circular single-stranded DNA molecule comprising a nucleic acid according to Claim 21.

23. A linear dsDNA that comprises at least one pro-shRNA expression module made up of a linker domain flanked by siRNA encoding domains, wherein said linker domain comprises two restriction endonuclease sites.

24. The linear dsDNA according to Claim 23, wherein said dsDNA comprises at least two pro-shRNA expression modules.

25. The linear dsDNA according to Claim 23, wherein said two restriction endonuclease sites of said linker domain are identical.

26. The linear dsDNA according to Claim 23, wherein said linker domain ranges in length from about 4 to about 25 bp.

27. A composition comprising two or more restriction endonucleases that are selected to cleave a target nucleic acid into fragments of a predetermined size.

28. The composition according to Claim 27, wherein said predetermined size ranges from about 15 to about 40 bp.

29. The composition according to Claim 27, wherein said composition comprises at least four restriction endonucleases.

30. The composition according to Claim 27, wherein said two or more restriction endonucleases cleave said target nucleic acid into a plurality of fragments that all have an identical single-stranded overhang.

31. The composition according to Claim 30, wherein said single-stranded overhang ranges from about 1 to about 5 nt in length.

32. The composition according to Claim 31, wherein said single-stranded overhang is 2 nt.

33. The composition according to Claim 32, wherein said 2 nt overhang is GC.

34. A system for producing an shRNA expression module for a specific target nucleic acid, said system comprising:

a nucleic acid according to Claim 17;

a ligase for ligating said nucleic acid to an initial dsDNA ; and

converting reagents for converting an intermediate nucleic acid to a linear dsDNA that comprises at least one shRNA expression module.

35. The system according to Claim 34, wherein said system further comprises two or more restriction endonucleases that are selected to cleave a target nucleic acid into fragments of a predetermined size.

36. The system according to Claim 34, wherein said converting reagents comprise amplification reagents.

37. The system according to Claim 36, wherein said amplification reagents comprise at least two amplification primers.

38. The system according to Claim 36, wherein said amplification reagents comprise a polymerase.

39. The system according to Claim 36, wherein said amplification reagents comprise a second linker loop nucleic acid.

40. The system according to Claim 34, wherein said system further comprises a vector.

41. A kit for producing a dsDNA molecule that encodes a shRNA specific for a target nucleic acid, said system comprising:

a nucleic acid according to Claim 17; and

instructions for using said nucleic acid in a method according to Claim 1.

42. The kit according to Claim 41, wherein said kit further comprises a ligase for ligating said nucleic acid to an initial dsDNA.

43. The kit according to Claim 42, wherein said kit further comprises converting reagents for converting a hairpin intermediate nucleic acid to a linear dsDNA that comprises at least one shRNA expression module.

44. The kit according to Claim 43, wherein said converting reagents comprise amplification reagents.

45. The kit according to Claim 44, wherein said amplification reagents comprise at least two amplification primers.

46. The kit according to Claim 44, wherein said amplification reagents comprise a polymerase.

47. The kit according to Claim 44, wherein said amplification reagents comprise a second linker nucleic acid.

48. The kit according to Claim 41, wherein said kit further comprises two or more restriction endonucleases that are selected to cleave a target nucleic acid into fragments of a predetermined size.

49. The kit according to Claim 41, wherein said kit further comprises a vector.

50. A method of at least reducing the expression of a genomic coding sequence in a target cell, said method comprising:

producing an shRNA expression module according to the method of Claim 1 that encodes a shRNA specific for said target nucleic acid; and

introducing an effective amount of said expression module into said cell to at least reduce expression of said gene.

51. The method according to Claim 50, wherein said method is an in vitro method.

52. The method according to Claim 50, wherein said method is an in vivo method.

53. The method according to Claim 50, wherein said method is a method of silencing expression of said gene.

54. The method according to Claim 50, wherein said method is a loss of function assay.

55. A nucleic acid library comprising a plurality of distinct nucleic acid members each comprising complementary domains separated by a linker domain, wherein said complementary domains hybridize to each other to produce a hairpin structure having a double-stranded stem domain and single stranded loop domain.

56. The library according to Claim 55, wherein said double-stranded stem domain of each member comprises a restriction endonuclease site.

57. The nucleic acid library according to Claim 55, wherein each of said members is present on a vector.

58. The nucleic acid library according to Claim 55, wherein at least one nucleic acid member encodes a shRNA molecule targeted to an unknown gene.